

What is claimed:

1. A system for receiving a communication signal, the system comprising:
 - an antenna that can be coupled to a subscriber terminal;
 - a compass secured to the antenna, the compass being adapted to

5 measure an orientation of the antenna;

 - a memory unit for storing data associated with a desired mounting configuration of the antenna; and
 - a processor coupled to the compass and the memory unit, the processor configured to generate a signal based on a measured orientation of the antenna

10 by the compass and data stored in the memory unit.
2. The system of claim 1, wherein the data is associated with a desired azimuth angle of the antenna.
- 15 3. The system of claim 2, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is substantially the same as, or within a prescribed threshold from, the desired azimuth angle of the antenna.
- 20 4. The system of claim 2, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is not substantially the

same as, or beyond a prescribed threshold from, the desired azimuth angle of the antenna.

5. The system of claim 1, further comprising an indicator configured to receive the signal from the processor.
6. The system of claim 5, wherein the indicator comprises a light source for generating an optical signal in response to the signal generated by the processor.

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7. The system of claim 5, wherein the indicator comprises an audio source for generating an audio signal in response to the signal generated by the processor.
- 15 8. The system of claim 5, wherein the indicator is configured to emit a signal when an orientation of the antenna is substantially the same as, or within a prescribed threshold from, a desired orientation of the antenna.
9. The system of claim 5, wherein the indicator is configured to emit a signal 20 when an orientation of the antenna is not substantially the same as, or beyond a prescribed threshold from, a desired orientation of the antenna.

10. The system of claim 1, further comprising:

a tilt sensor secured to the antenna, the tilt sensor adapted to measure an elevation angle of the antenna;

5 wherein the processor is coupled to the tilt sensor, and the processor is further configured to generate a signal based on a measured elevation angle of the antenna and data stored in the memory unit.

11. The system of claim 10, wherein the stored data comprises data associated with a desired elevation angle of the antenna.

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12. The system of claim 1, further comprising:

a positional sensor secured to the antenna, the positional sensor adapted to measure a position of the antenna;

15 wherein the processor is coupled to the positional sensor, and the processor is further configured to generate a signal based on a measured position of the antenna and data stored in the memory unit.

13. The system of claim 12, wherein the data stored in the memory unit comprises data associated with a desired position of the antenna.

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14. The system of claim 1, further comprising:

a digital signal processor for processing radio frequency signal received by the antenna;

wherein the processor is coupled to the digital signal processor and is configured to generate a signal based on a processed radio frequency signal.

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15. The system of claim 14, wherein the processor is configured to generate the signal when the processed radio frequency signal has a desirable quality.

16. A device for installing an antenna, comprising:

10 a structure attachable to the antenna;

a compass secured to the structure, the compass being adapted to measure an orientation of the antenna;

15 a memory unit for storing data associated with a desired mounting configuration of the antenna; and

20 a processor coupled to the compass and the memory unit, the processor configured to generate a signal based on a measured orientation of the antenna by the compass and data stored in the memory unit.

17. The device of claim 16, wherein the data is associated with a desired 20 azimuth angle of the antenna.

18. The device of claim 17, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is substantially the same as, or within a prescribed threshold from, the desired azimuth angle of the antenna.

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19. The device of claim 17, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is not substantially the same as, or beyond a prescribed threshold from, the desired azimuth angle of the antenna.

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20. The device of claim 16, further comprising an indicator configured to receive the signal from processor.

21. The device of claim 20, wherein the indicator comprises a light source for generating an optical signal in response to the signal generated by the processor.

22. The device of claim 20, wherein the indicator comprises an audio source for generating an audio signal in response to the signal generated by the processor.

23. The device of claim 20, wherein the indicator is configured to emit a signal when an orientation of the antenna is substantially the same as, or within a prescribed threshold from, a desired orientation of the antenna.

5 24. The device of claim 20, wherein the indicator is configured to emit a signal when an orientation of the antenna is not substantially the same as, or beyond a prescribed threshold from, a desired orientation of the antenna.

25. The device of claim 16, further comprising:

10 a tilt sensor secured to the antenna, the tilt sensor adapted to measure an elevation angle of the antenna;

wherein the processor is coupled to the tilt sensor, and the processor is further configured to generate a signal based on a measured elevation angle of the antenna and data stored in the memory unit.

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26. The device of claim 25, wherein the memory unit comprises data associated with a desired elevation angle of the antenna.

27. The device of claim 17, further comprising:

20 a positional sensor secured to the antenna, the positional sensor adapted to measure a position of the antenna;

wherein the processor is coupled to the positional sensor, and the processor is further configured to generate a signal based on a measured position of the antenna and a stored data in the memory unit.

5 28. The device of claim 27, wherein the memory unit comprises data associated with a desired position of the antenna.

29. The device of claim 16, further comprising:

10 a digital signal processor for processing radio frequency signal received by the antenna;

wherein the processor is coupled to the digital signal processor and is configured to generate a signal based on a processed radio frequency signal.

30. The device of claim 29, wherein the processor is configured to generate 15 the signal when the processed radio frequency signal has a desirable quality.

31. A device for processing data associated with an installation of an antenna,

the device comprising a processor, wherein the processor is configured to:

20 receive an input associated with a measured orientation of an antenna;
compare the input with data associated with a desired mounting configuration of the antenna; and
generate a signal based on the comparing.

32. The device of claim 31, wherein the processor is further configured to read the data from a memory unit.

5 33. The device of claim 31, wherein the processor is configured to receive the input from a circuit based compass.

10 34. The device of claim 33, wherein the measured orientation of the antenna comprises an azimuth angle of the antenna, and the desired mounting configuration of the antenna comprises a desired azimuth angle of the antenna.

15 35. The device of claim 34, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is substantially the same as, or within a prescribed threshold from, the desired azimuth angle of the antenna.

20 36. The device of claim 34, wherein the processor is configured to generate the signal when a measured azimuth angle of the antenna is not substantially the same as, or beyond a prescribed threshold from, the desired azimuth angle of the antenna.

37. The device of claim 31, wherein the processor is configured to receive an input from a tilt sensor.

38. The device of claim 37, wherein the measured orientation of the antenna 5 comprises an elevation angle of the antenna, and the desired mounting configuration of the antenna comprises a desired elevation angle of the antenna.

39. The device of claim 38, wherein the processor is configured to generate the signal when a measured elevation angle of the antenna is substantially the 10 same as, or within a prescribed threshold from, the desired elevation angle of the antenna.

40. The device of claim 38, wherein the processor is configured to generate the signal when a measured elevation angle of the antenna is not substantially 15 the same as, or beyond a prescribed threshold from, the desired elevation angle of the antenna.

41. The device of claim 31, wherein the processor is configured to receive an input from a digital signal processor, and generate the signal when an input from 20 the digital signal processor indicates that a radio frequency signal received by the antenna has a desirable quality.

42. A system for receiving a communication signal, comprising:
an antenna that can be coupled to a subscriber terminal; and
a compass fixedly secured to the antenna, the compass being adapted to
measure an orientation of the antenna.

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43. The system of claim 42, wherein the compass is a circuit-based compass.

44. A method of installing an antenna, comprising:
securing the antenna to a structure, the antenna carrying a feedback
10 device that provides a signal based on an orientation of the antenna and a
desired mounting configuration of the antenna;
adjusting a position or orientation of the antenna based on the signal or an
absence of the signal.

15 45. The method of claim 44, wherein the orientation of the antenna comprises
an azimuth angle of the antenna, and the desired mounting configuration
comprises a desired azimuth angle of the antenna.

46. The method of claim 44, wherein the orientation of the antenna comprises
20 an elevation angle of the antenna, and the desired mounting configuration
comprises a desired elevation angle of the antenna.

47. The method of claim 44, wherein the signal comprises an optical signal and the adjusting comprises positioning or orienting the antenna based on the optical signal.

5 48. The method of claim 44, wherein the signal comprises a termination of an optical signal, and the adjusting comprises positioning or orienting the antenna until the optical signal is terminated.

10 49. The method of claim 44, wherein the signal comprises an audio signal and the adjusting comprises positioning or orienting the antenna based on the audio signal.

15 50. The method of claim 44, wherein the signal comprises a termination of an audio signal, and the adjusting comprises positioning or orienting the antenna until the audio signal is terminated.

51. The method of claim 44, wherein the signal comprises a text message and the adjusting comprises positioning or orienting the antenna based on the text message.

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52. The method of claim 44, wherein the adjusting comprises changing an elevation angle of the antenna.

53. The method of claim 44, wherein the adjusting comprises changing an azimuth angle of the antenna.

5 54. The method of claim 44, wherein the antenna further carrying a memory unit, and the method further comprising inputting data associated with the desired mounting configuration of the antenna to the memory unit.

10 55. A method of initializing a feedback device secured to an antenna, the feedback device having a memory unit, the method comprising:
inputting data associated with a desired mounting configuration of the antenna to the memory unit.

15 56. The method of claim 55, wherein the data comprises a desired orientation of the antenna.

57. The method of claim 56, wherein the desired orientation comprises a desired azimuth angle of the antenna.

20 58. The method of claim 56, wherein the desired orientation comprises an elevation angle of the antenna.

59. The method of claim 56, further comprising determining the desired orientation of the antenna.

60. The method of claim 59, wherein the determining the desired orientation of
5 the antenna comprises:

determining a position of a base station from which signal is to be received by the antenna;

determining a position of the structure to which the antenna is to be secured; and

10 determining a desired azimuth angle of the antenna based on the positions of the base station and the structure.

61. The method of claim 59, wherein the determining the desired orientation of the antenna comprises:

15 determining a distance between a base station from which signal is to be received by the antenna and a position of the structure to which the antenna is to be secured;

determining a relative vertical distance between the antenna and the base station;

20 determining a desired elevation angle of the antenna based on the distance and the relative vertical distance.

62. The method of claim 55, wherein the data comprises information associated with a base station from which signal can be received by the antenna.